



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/591,886	06/09/2000	David Hugh Stevenson	99ED140952601	4214

7590 03/25/2004

Christopher F. Regan
Allen Dyer Doppelt
Milbrath & Gilchrist PA
P O Box 3791
Orlando, FL 32802-3791

EXAMINER

MOE, AUNG SOE

ART UNIT	PAPER NUMBER
----------	--------------

2612

DATE MAILED: 03/25/2004

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/591,886

Applicant(s)

STEVENSON, DAVID HUGH

Examiner

Aung S. Moe

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-41 is/are pending in the application.
- 4a) Of the above claim(s) 17-27 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-41 is/are allowed.
- 6) ☒ Claim(s) 28-30 is/are rejected.
- 7) ☒ Claim(s) 31 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II, Claims 28-41 in Paper No. 9 (received on 3/4/2004) is acknowledged. The traversal is on the ground(s) that "search and examination of the entire application can be made without serious burden". This is not found persuasive because according to MPEP section 803, a serious burden on the Examiner may be *prima facie* shown if the Examiner shows by appropriate explanation either separate classification, separate status in the art, or a different filed of searches. In this case, the Examiner has clearly stated in the last Office Action (paper no. 8) that the search for the Group I does not require a search for Group II because Group I and Group II have acquired a separate status in the art as shown by their different classification, thus, restriction for examination purposes as indicated in the previous Office Action is proper.

The requirement is still deemed proper and is therefore made FINAL.

Information Disclosure Statement

2. The information disclosure statement filed 6/9/00 fails to provide a copy of Japan Patent Abstract as listed in PTO 1449, Vol. 015 as listed in Other art of PTO 1449, thus, the information referred to therein has not been considered at this time, however, the Examiner will considered this IDS information upon receiving of a copy of "Patent Abstract of Japan, Vol. 015" as listed in Other Art part of PTO 1449.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 28 and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Chou (U.S. 5,923,958).

Regarding claim 28, Chou '958 discloses an image sensor chip (Fig. 2) comprising: an image sensor array (noted the array of die as shown in Fig. 3) formed on a top surface of the image sensor chip (10); a barrier (11) on the top surface of the image sensor chip (10) extending along at least a substantial part of at least one side of said image sensor array (i.e., see Figs. 2 and 3).

Regarding claim 30, Chou '958 discloses wherein said barrier (11) surrounds said image sensor array (i.e., noted the dam 11 surrounding the image sensor/die as shown in Figs. 2 and 3).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou '958 in view of Ozimek et al. (U.S. 5,433,911).

Regarding claim 29, it is noted that Chou '958 does not explicitly stated that the barrier (i.e., the Dam 11) is at least three microns high. However, it is conventionally well known as evidenced by Ozimek '911 that a few microns of tolerance is desired between the image sensor (18) and the cover plate in order to efficiently assemble a focal plane array image sensor having critical and demanding tolerances (i.e., see col. 1, lines 10-68). In view of this, having the system of Chou '958 and then given the well-established teaching of Ozimek '911, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Chou '958 by providing with at least three microns of barrier high since it was well known in the art as evidenced by Ozimek '911 that about five microns of tolerance is normally desired between the image sensor and the optical plate. Moreover, such a modification would assure a good optical path and efficient assemble of a focal plane array image sensor can be realized as suggested by Ozimek '911 (i.e., see col. 1, lines 60+).

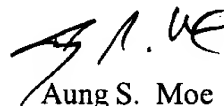
Allowable Subject Matter

7. Claims 31 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claims 33-41 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aung S. Moe whose telephone number is 703-306-3021. The examiner can normally be reached on Mon-Fri (9-5).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Aung S. Moe
Primary Examiner
Art Unit 2612

A. Moe
March 22, 2004